FACULTY OF VETERINARY MEDICINE
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CASE REPORT OF COMPLETE RECOVERY IN AN 8-YEAR-OLD SPORT HORSE WITH RIGHT SIDE FOREBRAIN SIGNS FROM PRESUMPTIVE CEREBROVASCULAR ORIGIN

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INTRODUCTION

- Head and neck turn without head tilt is most commonly associated with lesions localised in the cerebrum on the ipsilateral side
- Differential diagnosis includes trauma, neoplasia and inflammatory, toxic or vascular disease

Figure 1: severe head and neck turn

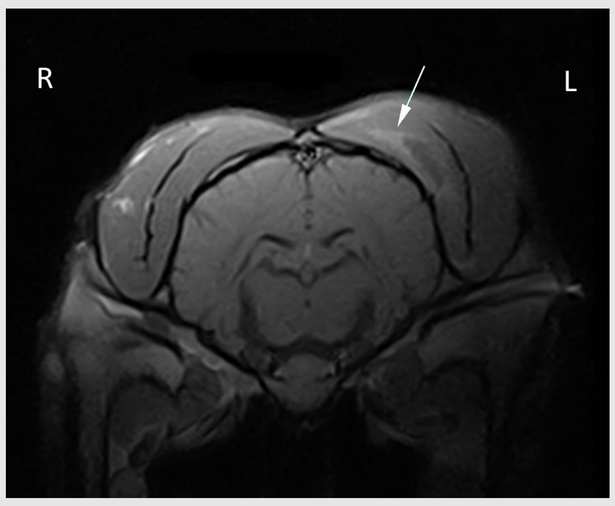

Figure 2: hyperintense contrast enhancing lesion in the left temporal muscle

Figure 3: hyperintense right venous sinus (arrow) and isointense left venous sinus (arrowhead)

CASE DESCRIPTION

- Eight-year-old gelding with acute onset of severe head and neck turn (figure 1) and continuous circling to the right
- No abnormalities on clinical exam, blood haematology, serum biochemistry, CSF analysis and head CT
- Negative Western blot for *Sarcocystis neurona* and *Borrelia burgdorferi* on CSF and blood serum
- Low-field MRI of the head: hyperintense contrast enhancing lesion in the left temporal muscle (figure 2), hyperintense right venous sinus and isointense left venous sinus (figure 3) on T2-, FLAIR- and STIR- images
- Treatment : oral prednisolone, acetylsalicylic acid, trimethoprim sulfadiazine, vitamin E and B1
- Evolution : complete resolution of clinical signs within one month and return to exercise

CONCLUSION

- Acute onset and rapid improvement is typical with vascular events and trauma → no signs of parenchymal bleeding or skull fracture
- MRI is the ancillary test to diagnose vascular events but a low-field MRI and 4 mm slices were used so small lesions could have been missed
- Flow difference in the venous sinuses might be correlated with cerebral venous sinus thrombosis but has a different clinical presentation in humans and has never been described in horses
- Common cerebral pathologies such as trauma, neoplasia, toxic, infectious and non-infectious diseases have been ruled out therefore an ischemic vascular event was the most likely cause of the clinical signs

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